TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, May 5, 1902.

The President, RICHARD H. HARTE, M.D., in the Chair.

OSTEOTOMY FOR BOW-LEG.

DR. JAMES K. YOUNG presented a girl, aged ten years, who, for the relief of deformity of the left leg, was subjected to osteotomy below the knee three months before.

SUBCUTANEOUS RUPTURE OF THIGH MUSCLES.

DR. OSCAR H. ALLIS presented a man, forty years of age, brakeman, who, on February 15, 1890, was standing on the rear end of an empty box freight car, weight 60,000 pounds, when it was hit unexpectedly by other cars coming slowly against it. The momentum knocked the man down. He fell with his body outside the track, but the advancing car ran over both thighs. The car was an eight-wheeled one, and two wheels passed over the thighs. He was taken promptly to the Presbyterian Hospital, where, on admission, the right limb was greatly swollen and bruised; the left limb much less so. In the right limb the wheel seemed to have passed a trifle above the midlength of the limb; in the left limb the apparent track of the wheel was at the junction of the lower with the upper two-thirds. The skin was not broken in either limb. The swelling was too great to permit of any satisfactory examination. Peripheral sensation was lost in the region of the injury to right limb, but not in the left.

Two weeks after the injury the hæmatoma broke down and was evacuated. No part of the skin sloughed in either limb. He was discharged at the end of thirteen weeks. Result, sensation returned to right limb; function so completely restored that the usual recklessness of brakemen was again indulged in, viz., the jumping on and off cars while in slow motion.

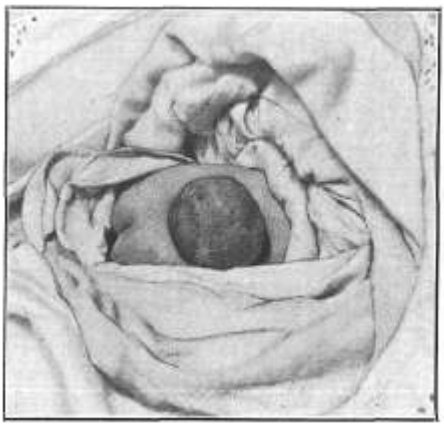

FIG. 1.—Spina bifida, five weeks old.

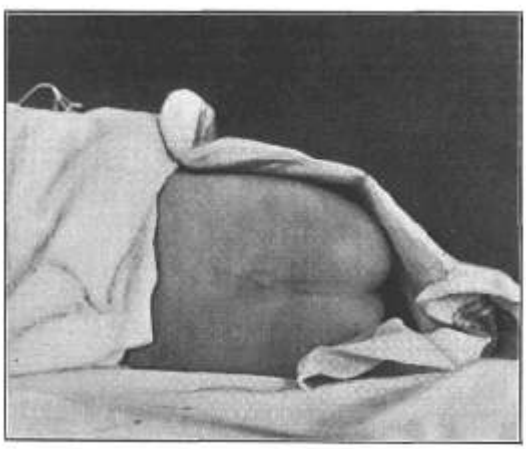

FIG. 2.—Spina bifida, after excision of sac.

The track of the wheels can now be distinctly seen as two broad shrunken belts. When the patient contracts the flexor muscles, they act as two-bellied muscles, especially marked on the right limb.

Dr. Allis said that there was no reason to dispute the accuracy of the history of the injury. The car was marked, weight, 60,000; it was moving slowly; only two wheels passed over him; the clothing, which was his only protection, consisted of winter pantaloons and drawers.

OSTEOPLASTIC OPERATION FOR SPINA BIFIDA.

DR. DE FOREST WILLARD presented an infant who at birth presented a large sessile tumor, lumbosacral, skin ulcerated. When seen at five weeks, epidermis had formed over the tumor, which was two and one-half inches in diameter; tensely distended during crying. Pressure upon the sac gave distress to the infant. The lower limbs were partially defective in motion, but not totally paralyzed, and there were no deformities of the legs. Condition of sphincters not ascertainable on account of age, but there was no apparent control of either bladder or rectum. In the centre of the sac was a dimple, apparently the attachment of the cord.

Operation at five weeks. A V-shaped portion of skin was excised, and the skin thoroughly dissected back from the sac. Upon opening the sac, the entire cauda equina was found adherent to the posterior wall; the filaments were dissected free and replaced in the spinal canal. A large section of the sac was excised, the remaining lateral portions being brought together over the large opening in the canal, which was an inch in length and three-quarters of an inch in width; spinous processes and laminæ being entirely absent. Redundant lateral portions of the sac were closely stitched with a continuous suture of catgut, the edges being inverted, and a staple stitch employed. Next, two large osseous flaps were cut from the crest of the ilia with a strong knife and turned inward upon their periosteal bases like a cellar-door, the fresh surfaces presenting outward. These were firmly united with catgut, and the opening in the canal thus accurately closed. The flaps of skin were then brought together and sutured in the same manner. The wound was dusted with aristol, and a dry aseptic dressing applied. The wound was protected from soiling

by enclosing the gauze within a superimposed piece of mackintosh, accurately sealed and united around its lower and two lateral margins by freely applied layers of collodion, the collodion being applied first to the skin over one half an inch in width around the margin, the mackintosh then laid in place and sealed thoroughly. By the use of this dressing combined with keeping the child upon its face and an abundance of absorbent cotton about the genitals and anus, all infection was prevented and primary union secured. The child suffered less discomfort after the operation than before; nursed and slept well, and recovered in two weeks. The tumor has not reappeared and the opening seems to be strongly closed, but the child is apparently becoming hydrocephalic, a not uncommon sequel. The legs show no change.

INTESTINAL ANTHRAX.

DR. DE FOREST WILLARD made the following report to complete the history of the case of anthrax reported by him in the ANNALS OF SURGERY, April, 1902, page 524.

The man, a leather worker, had been infected in the cheek and also in the intestines. The wound caused by excision of the cheek tissues healed speedily; after a long struggle, in which his life was in the balance for weeks from peritonitis from the intestinal infection, opening of the abdomen and evacuation of three quarts of pus caused slow improvement, the sinus closing in five months. Meantime he suffered greatly from intestinal pains, probably due to the adhesions of loops of intestines about the abscess wall; but these pains, together with the symptoms of partial obstruction, were slowly relieved, and he was discharged from the hospital in six months, apparently in good health.

EPITHELIOMA OF THE ORBIT; TREATMENT BY X-RAYS.

DR. WHARTON presented a woman who, for a number of years, had been suffering from an epitheliomatous growth which first appeared below the right eye, involving the lower lid. It gradually extended, until she was sent to the hospital under his care two months ago. At this time she had a very large growth, which extended beyond the limits of the orbit and had destroyed the right eyeball. He curetted the growth, removed the shrunken eyeball, cut away the edges, and then applied the X-rays from

five to ten minutes at intervals of two to three days. She has had in all twenty applications, and there has been marked improvement in the condition of the parts. A large amount of cicatrization has occurred.

ARTERIAL ANGIOMA OF THE EAR AND NECK.

DR. FRANCIS T. STEWART reported a case of cirsoid aneurism occurring in a medical student aged twenty-two years; he had been born with a nevus on the left ear, which grew with a rapidity out of all proportion to his general development. Hardly a month has passed without some hæmorrhage from the angioma; at times the bleeding would occur during sleep and often a large quantity of blood would be lost. For several years a bandage has been continuously worn around the head, owing to the constant dread of severe bleeding. The patient is unusually intelligent, quick and nervous in action, and markedly anæmic, owing to the repeated hæmorrhages. Occupying the site of the left ear and that portion of the neck immediately below it was an irregular swelling, purple in color, measuring six inches longitudinally and three inches laterally, the width of the mass lessening in the lower part. The whole swelling pulsated with considerable force, there being a number of arteries—the largest about the size of the radial—which ran into the mass, and which by their twisting and sacculation constituted most of the swelling. The skin was infiltrated with numerous enlarged venous capillaries. Pressure on the carotid caused a material diminution in the size of the tumor, but did not stop pulsation. Under ether anæsthesia an incision was made around the periphery of the angioma; each vessel was ligated as it was encountered, and all the vessels and overlying skin below and behind the ear were excised. The cartilage of the ear, which had been pushed forward by the growth so that it projected perpendicularly from the side of the head, was next sutured to the periosteum of the skull, and the incision closed except for a small area just below the ear, whose margins could not be approximated and which was allowed to granulate. The operation lasted three hours, was attended by frightful bleeding, although compression of the carotid was practised, and was followed by much shock. The patient was satisfactorily reacted, however, by saline infusion and stimulants, and the wound healed without mishap. The only vestige of his former trouble is a slight bluish discoloration occupying the region of the lower ear.

ADVANCED CARCINOMA OF THE BREAST.

DR. STEWART presented a woman, aged forty-five years, who had noticed a hard lump about the size of a hazel-nut just to the inner side of the nipple three years before coming under observation. This increased very slowly in size for one year, when the rapidity of the growth became accelerated, until the entire breast was the seat of a hard mass. The skin covering the breast had ulcerated, the huge tumor resembling a crater. The axillary lymph glands were swollen and the growth was adherent to the pectoralis major muscle. The breast, both pectoral muscles, and the axillary glands were excised, and the wound closed by raising large flaps from the belly and back to fill in the deficiency left by the removal of the mass. The temperature remained about normal for three weeks after operation, and the tip of one of the flaps sloughed, leaving an area about the size of the palm to granulate. His object in bringing this case before the Academy was to show the result after the Warren method of the closing an enormous wound following an extensive excision of the breast, and also the amount of comfort gained for a patient subsequent to an operation for a breast cancer which might have been considered inoperable. The operation was performed ten months ago, and there were no signs of recurrence thus far.

DR. ALLIS said he had had infection in every case in which he had to do this operation, and the reason was this: the surgeon takes away the great and small pectoral; that leaves a space which is bridged over by the clavicle which stands out so that when the skin is brought over there is left an air-space which invites infection.

One of his cases was quite unique and interesting; the shoulder-joint approximating the operation became infected. He drained right through the joint, washing it out, and in the course of five or six days removed the drainage. She recovered perfect use of the shoulder.

DR. RODMAN said that one of the patients who was shown to the Academy by him fifteen months ago is now dying from recurrence. But in another case, operated four years last October, the third operation, a most extensive operation for a recurring scirrhus growing from the sternal portion of the mammary gland, the patient is entirely well to-day.

In yet another case reported to him last month, the patient is well a little more than four years, having been operated in December, 1897.

SUPPURATIVE CHOLECYSTITIS DUE TO THE TYPHOID BACILLUS.

DR. GEORGE ERETY SHOEMAKER reported the case of a woman, aged thirty-three years, who was seen at her home by Dr. Xander for an inflammation in the region of the gall-bladder. She had had six confinements without sequelæ, and had aborted two months before at three and one-half months of gestation, while suffering from a severe attack of typhoid fever in the Methodist Hospital. During this attack, which began October 15, 1901, there were noted, as confirmatory of the diagnosis of enteric fever, the Widal reaction, spots, tympany, and typhoid stools. Though dangerously ill, she recovered fully and remained well four weeks. Then began, December 27, 1901, the present attack, with soreness and pain in taking a long breath, two or three inches to the right of the median line and above the level of the navel. Turning in bed gave severe pain. No cough, chill, or jaundice. There was absolutely no previous history of a gall-stone or gall-bladder attack. A mass below the rib edge was noted by the patient two days later. Her temperature ranged to 101° F., pulse to 110. There was some perspiration. When seen January 2, 1902, by the writer, a distinct mass could be felt to the right of the median line below the rib edge; the upper half of the right rectus muscle was rigid, the lower abdomen was tympanitic; the tenderness was greatest over the gall-bladder, less over the appendix, and absent on the left side. Vaginal examination was negative; there was no jaundice, no vomiting. She was sent to the Presbyterian Hospital for operation; diagnosis, cholecystitis with abscess. Leucocyte count, 15,200. The pain was very severe during the night. Next day, on opening the abdomen vertically over the mass, no adhesions were found to the parietal peritoneum. The liver, gall-bladder, and neighboring viscera were massed firmly and covered with well-organized exudate. The recognition of the gall-bladder was a matter of some difficulty; but without separating its adhesions, after proper packing, it was opened with great ease by a blunt dissection and about two ounces of pus allowed to escape. This was yellowish, streaked with blood

and contained small clots; the portions escaping last contained mucus, but no bile. The walls of the gall-bladder were about one-eighth inch thick, much softened by inflammation, and of a purplish red inside; they bled on the lightest touch, so that small clots, constantly renewed, concealed from recognition by the finger a solitary gall-stone, which was, however, afterwards found and removed through the wound. It had no facets. The gall-bladder opening was stitched in the wound and drained. There was no complication in the recovery, and the patient left the hospital on the twenty-sixth day with a small sinus discharging a very little mucoid secretion from the gall-bladder wall. No bile.

A culture made by Dr. Foulkrod, under the supervision of Dr. Steele, in the laboratory of the hospital, gave a pure culture of a bacillus identical with the typhoid bacillus.

Four months later the patient is strong and well, doing her own work, including washing, without any discomfort whatever. The sinus still persists, a very little mucopurulent fluid staining the dressing. When it closes, she feels some discomfort, and she therefore re-opens it. Only once since the operation has anything resembling bile appeared, when about six weeks ago a few drops of greenish fluid escaped for a week. The cystic duct appears to have been obliterated by inflammation. No gall-stone can be now found.

INTERSCAPULO-THORACIC AMPUTATION.

DR. LE CONTE read a paper with this title, for which see October number of the ANNALS OF SURGERY.

DR. W. L. RODMAN said that he did not think that the weak and excessive heart action in this case was entirely due to hæmorrhage. The pulse was 120 before operation, and the man was known to have Graves's disease, than which nothing produces a more irritable heart. Furthermore, one should not forget the rapid dismemberment, and the additional fact that limb and tumor weighed fifteen pounds. The existence of Graves's disease and the rapid amputation were as potent factors in producing shock as the hæmorrhage. The subsequent behavior of the case would seem to prove it.

Dr. Le Conte thinks that he made an error in ligating the first portion of the subclavian, and in this opinion Dr. Rodman

concurred. Ligations of the first and second portions of the subclavian have been looked upon as undesirable, if not very generally unjustifiable procedures. He who does them goes into a hornet's nest. The artery is so intimately surrounded by important veins and nerves, and, moreover, gives off all of its large branches from the first portion, that both primary and secondary hæmorrhage are greatly to be feared. The pleura beneath is very apt to be wounded, as in this case. Still, in spite of difficulties seemingly almost insurmountable, the subclavian has been successfully ligatured in its first portion. A vast majority of such cases have, however, been fatal.

Had Dr. Le Conte attached the vessel in its third portion, as he now suggests, the operation would have been both an easier and a safer one. Dr. Rodman also questioned the wisdom of removing the entire clavicle, unless it be diseased. He should feel safer in dividing the bone where it is smallest, at the junction of the outer and middle thirds, by means of a Gigli saw, which can so easily be slipped under the bone. In this way there would be little to fear in the way of hæmorrhage. The inner end of the clavicle is a dangerous region, and one to avoid when possible. Should Dr. Le Conte modify his operation so as to ligate the third portion of the subclavian, and remove only the outer third or half of the clavicle, he will then have an easy and safe procedure.

Dr. Le Conte said that his object in recommending the disarticulation of the sternal end of the clavicle was to give the largest possible exposure for the ligation of the vessels, and the procedure certainly accomplishes this well. The question of resecting or disarticulating resolves itself into the following consideration. If the veins are of normal size and normal relations, a resection of the clavicle will probably give all the room required for safely dealing with them, but if they are much increased in size or of abnormal relationship, a disarticulation of the sternal end of the clavicle is more safe, for it gives a much larger field for their ligation. No one can possibly tell before operation the size and relationship of the veins. In malignant disease, they are usually much increased in size, therefore the largest possible exposure will be the safest procedure.

Owing to the many difficulties encountered in this operation, even in the hands of the most skilful surgeons, he felt that there

must be some better way of exposing the vessels than by the use of Berger's method. By disarticulation he got a better exposure, but perhaps at a greater risk of wounding the important structures at the root of the neck. If one omits the disarticulation of the clavicle, the same incision as proposed above will give a fair exposure of the axillary vessels, provided the costal section of the pectoral muscle is severed in the axilla, and the pectoralis minor is divided and reflected upward, but it will not expose the anterior scalene muscle or the junction of the cephalic with the subclavian vein. In other words, it exposes the vessels too far out to eliminate all the dangers of hæmorrhage. As yet he had experienced no difficulty in disarticulating the sternal end of the clavicle without opening the deep layer of the deep cervical fascia, and no harm can come to the vital structures in this region unless this deep layer is opened. (*Vide* Transactions of XIII International Congress, Paris, 1900, Section of General Surgery, p. 467.)